Discussion Papers

Hungarian Educational Research Journal
2018, Vol. 8(4) 108–111

http://herj.lib.unideb.hu
Debrecen University Press
DOI:10.14413/HERJ/8/4/9

The Relationship between Health-Awareness and Academic Achievement on a National Representative Sample

Karolina Eszter Kovacs[30]

Presented: European Conference on Educational Research 2018

Proposal information

According to previous researches and theories, sport and health-awareness (Kovacs & Nagy, 2017) can be determined as non-academic achievement. Thus, a student who does regular physical activity, has a healthy diet, does not do health-damaging behaviours (smoking, alcohol consumption and substance use), shows a responsible sexual behaviour (e. g. protection, ignoring promiscuity), shows an assertive behaviour instead of aggression and applies adaptive coping strategies (Kovacs, 2018). Therefore physiological (e. g. sport, nutrition etc.) and psychological factors (e. g. anxiety, coping etc.) can be seen as the elements of health-awareness as non-academic achievement. This phenomenon is influenced by several factors namely by intrapersonal (e. g. gender, personality), interpersonal (e. g. family, peers, school) and socio-cultural factors (e. g. socio-economic status). Previous researches have already measured the connection between heath-awareness and academic achievement. It can be stated that it has a strong influence on school absence and dropout as well. In case of regular smoking, the likelihood of the school dropout is higher (Cox et al, 2007) regarding boys and girls too. Concerning alcohol consumption, ambivalent results could be experienced as some of the researches showed a positive connection between regular alcohol consumption and school dropout and worse GPA (Balsa et al, 2011). However, some investigations showed no relation between academic achievement and alcohol consumption. Substance use shows a positive correlation with school dropout and low academic achievement, and with low academic commitment (King et al, 2006). In addition, health-risk behaviours are in a strong connection with depression, and with lower self-esteem and body-satisfaction (Nerini et al, 2016) as many investigations had the result that the level of depression is higher among regular smokers, binge-drinkers and substance users which has a negative effect on academic achievement and it can lead to dropout at each

[30] University of Debrecen, Debrecen (Hungary), Email address: karolina92.kovacs@gmail.com, ORCID: 0000-0002-1186-7836

educational level. Sport shows an ambivalent relationship with academic achievement as some reported a positive relationship between regular physical activity and learning performance, while others show a negative connection between the two factors (Kovacs, 2015). Usually, it is stated that sport and a type of hobby and recreation has a positive influence on academic efficacy while competitive sport has a negative effect as it creates a zero-sum situation. Academic achievement is also in a strong positive relation with total health and resilience (WestEd, 2003). The perceived health has an evident and positive effect on academic achievement and it is a protective factor against school dropout as well. Mental health can be detected as a protective factor too against low academic achievement (and against problematic and health-risk behaviour). As its element, higher level of anxiety has a negative influence on learning as students with high level of internalised stress (sadness, anxiety, depression, altogether distress) and externalised stress (anger, frustration, fear) correlates with low level of academic achievement and worse GPA (Roeser et al, 1998). This is in connection with the coping flexibility and strategies of the students (Nagy & Kovacs, 2017) as students who can cope with their problems more efficiently can achieve better learning results. Keyes et al (2011) stated that the dimensions of wellbeing like emotional, social and psychological wellbeing are in a negative relation with academic inefficiency and dropout.

Methods

The aim of the study was to investigate the connection between health awareness as non-academic achievement and academic achievement. The sample consists of students learning at 9th, 10th, 11th and 12th grade in traditional and sport schools (grammar or vocational schools) in the seven regions of Hungary and in Budapest. Three institutions were selected from each region, thus the sample has 3015 participants, 1675 sport school students and 1340 traditional sport school students. The gender distribution is representative regarding the Hungarian population, 44,6% of the participants is male while 55,4% of them is female. The mean age of the sample is 16,44 years (sd=1,122) 12,6% of the students come from Budapest, 25,6% of them from county seats, 10,1% of them from other big cities, 28,3% of them from small cities, 22,5% of them from villages and 0,9% of them from farms. Regarding the territorial distribution, 10,1% of the participants live in the North-Hungarian Region, 16,4% of them in the North-Great-Plain, 11,5% of them in the South-Great-Plain, 10,9% of them in the South-Transdanubia Region, 17,7% of them in the Central-Transdanubia Region, 6,7% of them in the Central Hungarian Region, 8,5% in the West-Transdanubia region and 18,1% of them in Budapest. Regarding the methodology, health-awareness was measured as non-academic achievement. The test repertoire contained health-awareness (Health-awareness Inventory [HAI], Nagy & Kovacs, 2017; Cronbach α=0,823), coping flexibility (Coping Flexibility Scale [CFS], Kato, 2012, Cronbach α=0,810), anxiety (Child Anxiety Life Interference Scale [CALIS], Lyneham et al, 2013, Cronbach α=0,899), well-being (WHO Well-being Inventory [WBI-5], Susanszky et al, 2006, Cronbach α=0,828), and spiritual well-being (Spiritual Well-Being Scale [SWBS], Cotton et al, 2005, Cronbach

α=0,791) were measured. Furthermore, the grades of the subjects (Hungarian literature and grammar, mathematics, history, foreign language, biology, chemistry, physics, geography) and subjective learning evaluation ("How well do you achieve according to you?"; "How well do you achieve according to your teachers?"; "How well do you achieve according to your parents?") as academic achievement. We hypothesised that a positive relationship can be detected between health-awareness and academic achievement thus the more health-conscious the student is (namely the higher its coping flexibility, general well-being and spiritual well-being is and the lower its anxiety is), the better academic achievement it has. Parents were informed and they gave their consent in accordance with research ethics. The questionnaire data were typed into Excel and then analysed in SPSS for Windows, version 22.

Conclusion

Our hypothesis was confirmed as a significant positive relationship can be detected between health-awareness and all of the subjects. A significant moderate connection can be found between the whole GPA (grade point average) and health-awareness (r=0,309; p<0,001), and the subjects alone show moderate or at least weak but significant relation to health awareness too. It also shows a moderate correlation with subjective academic achievement according to their own opinion (r=0,360; p<0,001), according to their perceptions related to the attitudes of the parents (r=0,327; p<0,001) and the teachers (r=0,338; p<0,001). Thus the higher the students' health-awareness is, the better objective and subjective academic achievement can be detected. Coping flexibility shows a positive weak but significant correlation with GPA (r=0,085; p<0,001) and with all of the subjects. In addition, a significant positive but weak connection can be found between coping and own perception (r=0,137; p<0,001), teachers' perception (r=0,146; p<0,001) and parents' perception (r=0,103; p<0,001). Regarding anxiety, a negative and weak but significant correlation can be measured with GPA (r=-0,109; p<0,001) and with the subjects; furthermore, it showed a correlation with own evaluation (r=-0,151; p<0,001), teachers' attitudes (r=-0,139; p<0,001) and parents' perception (r=-0,137; p<0,001). Finally, general and spiritual well-being shows a weak, but significant positive correlation with GPA (WB: r=0,056; p<0,001; SWB: r=0,204; p<0,001) and school subjects. Also a positive weak connection can be experienced between general well-being and subjective evaluation (r=0,168; p<0,001), teachers' perception (r=0,123; p<0,001) and parents attitudes (r=0,086; p<0,001); and a positive correlation can be measured between spiritual well-being and own evaluation (r=0,238; p<0,001), teachers' perception (r=0,219; p<0,001) and parents' perception (r=0,253; p<0,001).

Keywords: health-awareness, academic achievement, correlation

References

Balsa, A. I., Giuliano, L. M. & Frenchc, M. T. (2011). The effects of alcohol use on academic achievement in high school. *Econ Educ Rev., 30*(1), 1–15.

Cotton, S., Larkin, E., Hoopes, A., Cromer, B. A., & Rosenthal, S. L. (2005). The impact of adolescent spirituality and religiosity on depressive symptoms and health risk behaviour. *Journal of Adolescent Health, 36*, 529.e527-529.e514.

Cox, R. G., Zhang, L., Johnson, W. D., & Bender, D. R. (2007). Academic performance and substance use: findings from a state survey of public high school students. *Journal of Scool Health, 77,* 109-15.

Kato, T. (2012). Development of the Coping Flexibility Scale: Evidence for the Coping Flexibility Hypothesis. *Journal of Counseling Psychology, 59*(2), 262–273.

Keyes L. M. C., Eisenberg, D., Perry, G. S., Dube, S. R., Kroenke, K., & Dhingra, S. S. (2011). The Relationship of Level of Positive Mental Health With Current Mental Disorders in Predicting Suicidal Behavior and Academic Impairment in College Students. *Journal of American College Health, 60*(2), 126-133.

Kovacs K. (2015). A sportolas mint tamogato faktor a felsooktatasban. Center for Higher Education and Development, Debrecen.

Kovacs K. (2018). Institutional Environment of Students' Sports Activities in Central Europe. *Hungarian Educational Research Journal, 8*(3),

Lyneham H. J., Sburlati E. S., Abbott M. J., Rapee R. M., Hudson J. L., Tolin D. F., Carlson S. E. (2013). Psychometric properties of the Child Anxiety Life Interference Scale (CALIS). *Journal of Anxiety Disorders 27*(7), 711–719.

Nagy B. E. & Kovacs K. E. (2017). Egeszsegmagatartassal kapcsolatos attitudok vizsgalata kozepiskolas es egyetemista fiatalok koreben. *Orvosi Hetilap, 44,* 1754-1760.

Nerini, A., Matera, C., & Stefanile C. (2016). Siblings' appearance-related commentary, body dissatisfaction, and risky eating behaviors in young women. *Revue Europeenne de Psychologie Appliquee/European Review of Applied Psychology, 66*(6), 269-276.

Pusztai, G. (2015). Tokeelmeletek az oktataskutatasban. In: Varga, A. (szerk.): *A nevelesszociologia alapjai*. Bolko-Print Nyomda, Pecs, 137-160.

Rew, L., es Horner, S. D. (2003). Youth resilience framework for reducing health-risk behaviors in adolescents. *Journal of Pediatric Nursing, 18,* 379–388.

Roeser, R. W., Eccles, J. S., & Strobel, K. R. (1998). Linking the study of schooling and mental health: Selected issues and empirical illustrations at the level of the individual. *Educational Psychologist, 33,* 153- 176.

WestEd. (2003). Student well-being: Essential to academic success. R&D Alert, 5, 1, 8-9.